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# ROLE OF KNOWLEDGE MANAGEMENT IN e-GOVERNANCE

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*The e-Governance, which has potential to break the barrier between urban and rural areas and provide more efficient administration even in remotest areas has not made as much impact as by the e-Commerce.*

*This paper provides brief description of need and advantages of e-Governance and the list of related projects undertaken by some of the state governments in India.*

*It also presents brief account of significance and prerequisites of establishing knowledge management system required for e-Governance.*

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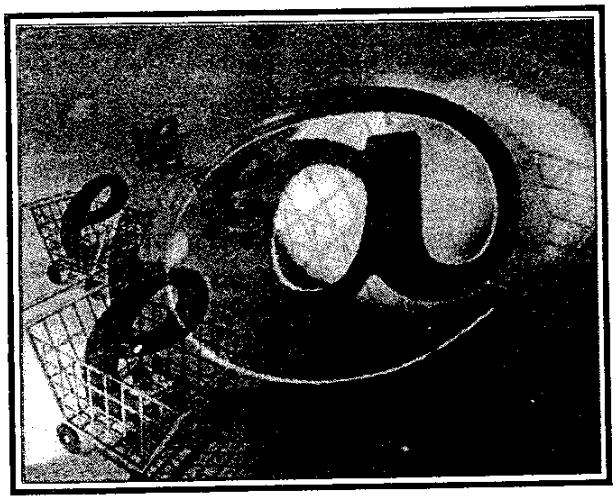

**1. Introduction:**

The advent of Information and Communication Technology (ICT) in the recent years has presented an opportunity for the IT managers and the senior officials in the government to change the way organizations leverage and value their information assets. With the ability of easy access to information mission delivery, resource management and data dissemination can be raised to levels, which were previously not at all possible. In contrasts to the private industrial and business, government organizations are measured not by profits and losses, but by their ability to deliver upon their mission. Regardless of this mission, the ability to understand the citizen and the ability to use the resources are the key factors in matching services to citizen needs.

**2. e-Governance:**

Electronic governance or e-Governance is the latest buzzword for governments trying to involve people in administration, address transparency in their bureaucracies, and make themselves more responsive to their citizens. The benefits of e-Governance are faster decision making, reduction of duplication of work, detection of corruption and illegal transactions, prevention of knowledge drain and crisis handling.

The objective of the conventional e-Governance is to help citizens in (i) paying utility bills (telephone, water, electricity, etc.), taxes and so on, (ii) handling registration formalities for land ownership, marriage, birth, and death (iii) processing application forms and renewals of driving licenses, work permits and passports (iv) lodging complaints. The e-Governance will cut the frontiers of time and space. It helps citizens to access information at anytime, at any place using net-enabled system. The object of the conventional e-Governance is a set of documents which may be rule books, guidelines, files, applications, circulars, government orders, memorandums, letters, archives and classified information.

This model of e-Governance has two independent components: (i) Administration and (ii) Citizen & Government. The administration component has two major subdivisions, which are inter-department and intra department. In the same way the component of "Citizen and Government" has two major subdivisions such as citizen to government and government to citizen.

**2.1. Administration:** e-Governance entails an Intranet for secure, authenticated inter/intra

departmental electronic data interchange. Decision-making and activities of a government of intra department are hierarchy-based. There are two kinds of hierarchies in intra department: official hierarchy and regional hierarchy. Inter-Department activities are such as sharing of information, mutual cooperation, and monitoring and assistance.

**2.2. Citizen and Government:** The financial aspects of Citizen-to-Government are taxes, utility bills, penalties, and toll money etc. The non-financial aspects of Citizen-to-Government are voice of the people, memorandum, requests, and general elections etc.

The financial aspects of Government-to-Citizen are loans, relief funds. The non-financial aspects of Government-to-Citizen are education and training (e-Learning), opinion polls, survey, intelligence and reports. E-Governance can harness the internet and cable networks to spread quality education and training across the country.

**2.3 Need of e-Governance:** The e-governance needs to be promoted for the purposes as listed below:

- To improve quality of governance products and services being currently provided
- To provide new governance products and services
- To enhance participation of people in choice & provision of governance products & services
- To bring new sections of society under the governance sphere (including those who are most likely to remain excluded — the poor, the illiterate, the differently enabled, indigenous people, the migrants and displaced people)

**2.4 Advantages of e-Governance:** The various advantages of the e-Governance are as presented below:

- Integration of various ministries and departments for Effective Perspective Planning and Evaluation by all government ministries and departments. Instead of planning in isolation, integrated planning will have a greater ramification. Otherwise, ministries have to write to different agencies to get the necessary information, and then compile it for its planning and decision making exercise, which naturally tends to take lot of time.
- Documentation, monitoring and control of various projects in social and economic sectors. The Projects, which are having influences in multiple departments/ministries and/or implemented in multi-locations can easily be monitored and measures for their control can be taken based on detailed level analysis.
- Geographic Information System based system for better understanding
- Utilities Management
- Crime Control and management: The trouble spots can easily be identified with the help of crime related data and GIS. Based on the outcome security forces can be deputed to the vulnerable locations
- Poverty Alleviation –Identification of below poverty group and combining this with food for work and other employment generation projects.
- Welfare Projects –the beneficiaries can be easily identified and efforts can easily be made for the benefits to reach the needy ones and also within the scheduled time frame.
- Revenue Generation by elimination of tax evasions–discrepancies can easily be identified and potential areas for more revenue generation can be analyzed on a timely basis.
- Corruption free Utilities Management in all development areas – to identify the possible areas, where corruption might take place and block the loopholes in such areas.
- Birth - Death monitoring and control.
- Multipurpose citizen identification system: Instead of having a number of cards for driving license, voter identification and availing various government facilities, a single multipurpose card will eliminate lot of unnecessary data entry and maintenance.

**2.5 e-Governance Projects in India:** The state governments have already taken some initiatives to form an IT task force to outline IT policy document for the states. And the citizen charters have started appearing on government websites. For

governments, the more overt motivation to shift from manual processes to IT-enabled processes may be was to increase efficiency in administration and service delivery. But, this shift can be conceived as a worthwhile investment, which has potential for returns.

Some of the important e-governance projects, which are being executed at the central government level, include Fertnet, Dacnet, Passport System, Company Registration System, and the Community Information Centre projects in the northeastern states, etc.

In addition to the normal computerization of various activities of their ministries and departments, some of the recent e-governance projects being implemented by various state governments include:

| State/Union Territory | Programme Information and Delivery of Entitlements |
|---|---|
| Andhra Pradesh | E-Seva, CARD, VOICE, MPHS, FAST, e-Cops, AP online—One-stop-shop on the Internet, Saukaryam, Online Transaction Processing |
| Bihar | Sales Tax Administration Management Information |
| Chhattisgarh | Chhattisgarh InfoTech Promotion Society, Treasury Office, e-linking Project e-Kosh –Online System of Treasuries and Pensions |
| Delhi | Automatic Vehicle Tracking System, Computerization of Website of RCS Office, Electronic Clearance System, Management Information System for Education, Online Public Grievances System etc |
| Goa | Dharani Project |
| Gujarat | Mahiti Shakti, Request for Government Documents Online, Formbook Online, G R Book Online, Census Online, Tender Notice. |
| Haryana | Nai Disha |
| Himachal Pradesh | Lok Mitra |
| Karnataka | Bhoomi, Khajane, Kaveri |
| Kerala | E-Srinkhala, RDNet, Fast, Reliable, Instant, Efficient Network for the Disbursement of Services (FRIENDS) |
| Madhya Pradesh | Gyandoot, Gram Sampark, Smart Card in Transport Department, Computerization MP State Agricultural Marketing Board (Mandi Board) etc |
| Maharashtra | SETU, Online Complaint Management System—Mumbai |
| Rajasthan | Jan Mitra, RajSWIFT, Lokmitra, RajNIDHI |
| Tamil Nadu | Rasi Maiyams–Kanchipuram; Application Forms related to Public Utility, Tender Notices and Display |

**Source: NIC website**

### 3. Knowledge Management:

Knowledge management (KM) is the management of information, skill, experience, innovation, and intelligence. Gartner defines KM as "the creation, capture, organization, access and use of knowledge". It uses many technology categories, almost none of which are exclusive to KM, which is a top down effort (practice) to try to understand and manage knowledge. KM may use specific practices such as business intelligence, collaboration, content management, email, video conferencing, work place tools, portals and business applications. The knowledge management is the one, which ultimately is to be used for planning and implementation of various government schemes and projects.

Managing knowledge involves managing domains of knowledge that are valued for achieving strategic objectives. The very nature of knowledge is that it changes fast and renders information obsolete at a rapid pace. Building knowledge management requires identifying and storing the collected information in an enterprise knowledge repository.

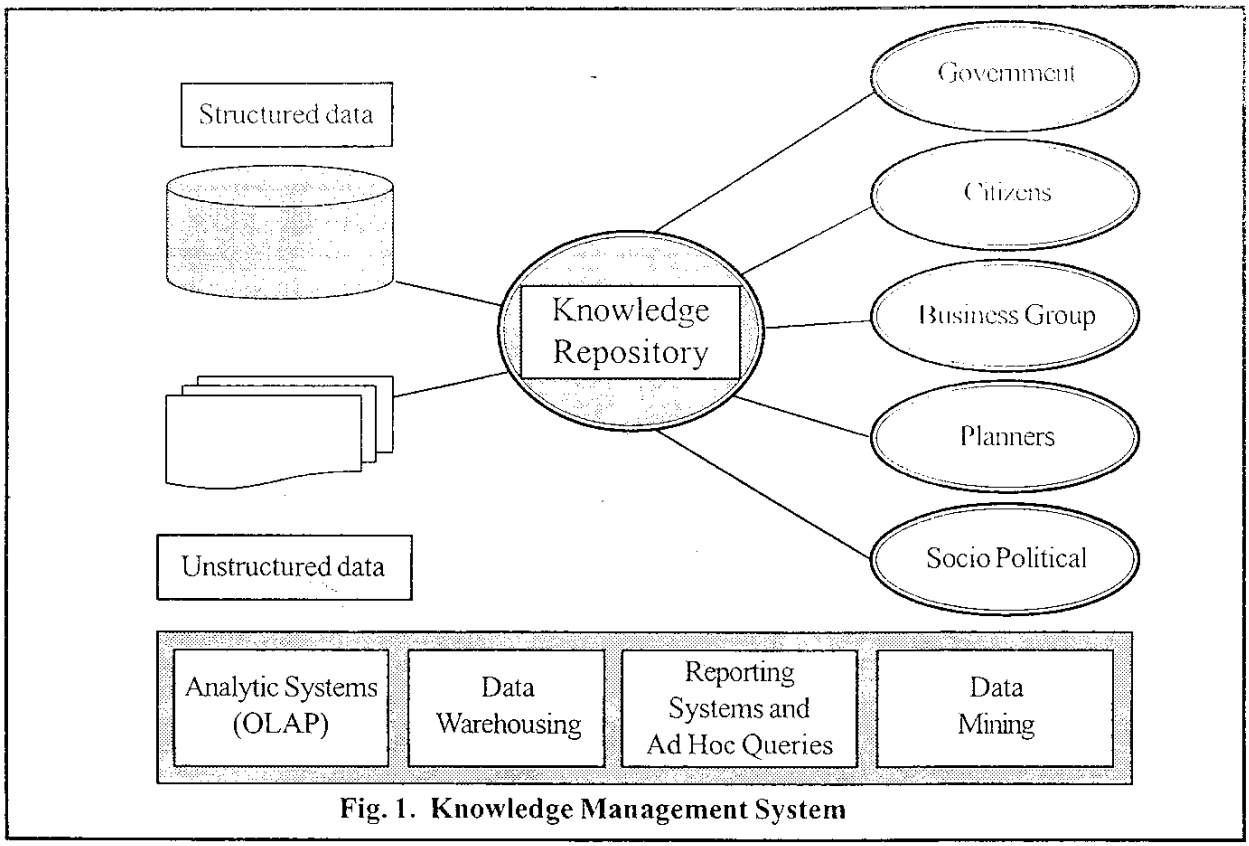


**Fig. 1. Knowledge Management System**

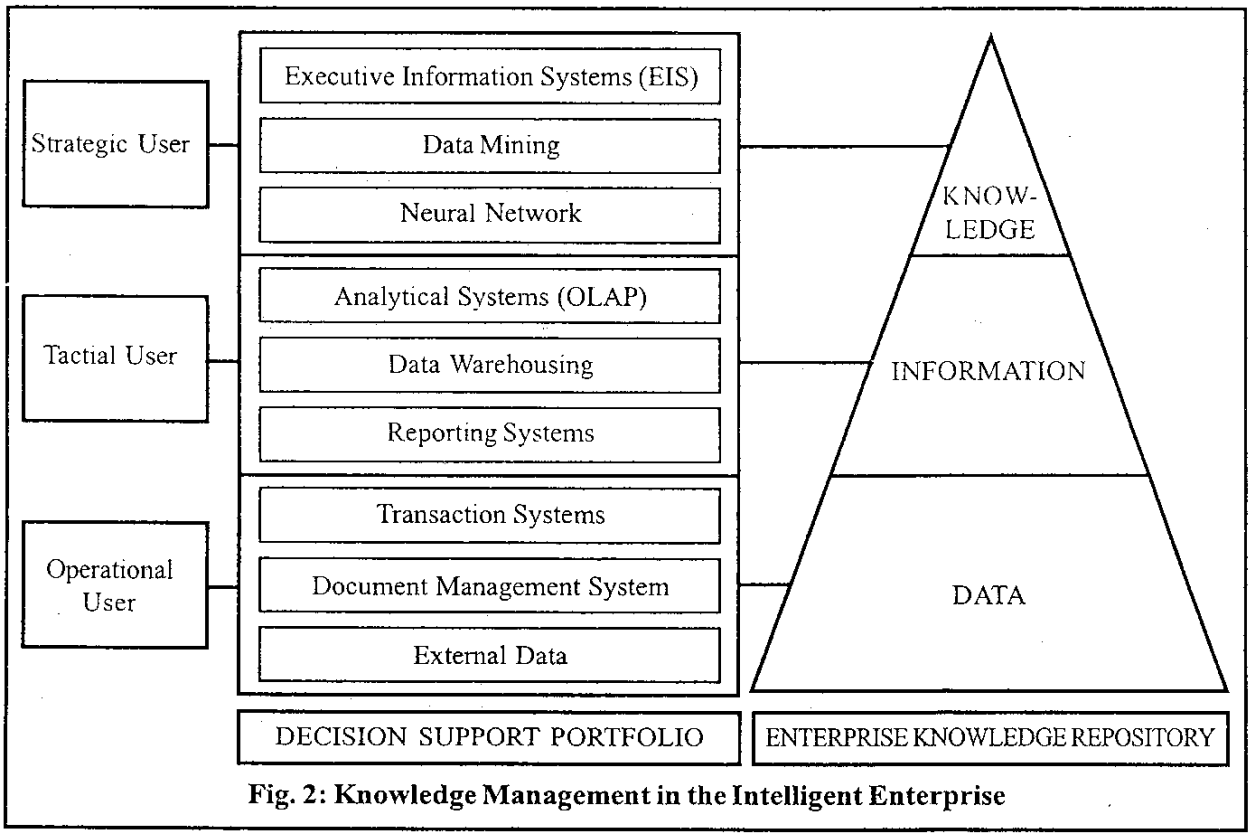


**Fig. 2: Knowledge Management in the Intelligent Enterprise**

**3.1 The Significance of Knowledge Management in E-governance:** E-government is a virtual organization, which provides public management and public service and is not normally engaged in the creation of material resources but has knowledge management system significant features. Knowledge management based on the e-government environment is a new management concept, which adopts new management methods and plays an important role in promoting the transformation of government function and improving the government's efficiency and image. Specially, the significance of implementation of knowledge management in e-government can be divided into the following three aspects.

**3.1.1 To be conducive to enhance governments' competence:** During the process of economic globalization, the competency of national comprehensive power is mainly reflected in its economic competency, which in turn depends on government's competitiveness level. Under e-government environment, knowledge management swooped knowledge as the most important resource and aimed at maximizing its access and use to improve the competitive power of the government. The government stressed the need for knowledge management to be put at the core of its activities and for taking corresponding measures to encourage staff to work on continuous self-improvement and enhancement of their sense of competition and thus enhancing the government's overall competitiveness, innovation capacity and contingency forces.

**3.1.2 To be conducive to raise government's service quality:** Knowledge management running in e-government environment is an electronic workflow to be controlled by laying stress on cooperation between different departments and staff's awareness of cooperation. Knowledge management circulates around knowledge acquisition, knowledge analysis, knowledge processing, knowledge distribution and other means, to realize standardization of service experience and chief process for increasing service quality of government office.

**3.1.3 To be conducive to promote healthy development of e-government:** For the process of governance in modern governments, knowledge management is indispensible. Knowledge management plays a very important role in the shift of the government management

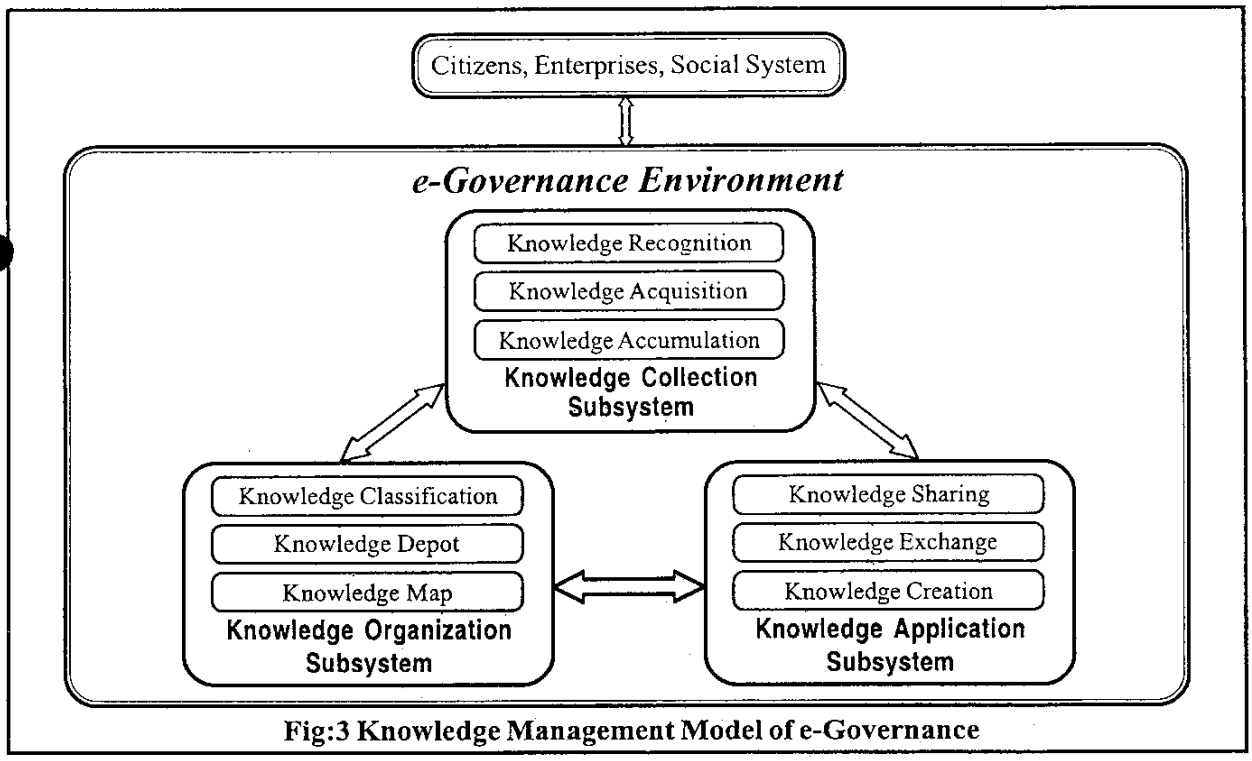


**Fig:3 Knowledge Management Model of e-Governance**

paradigm and improving governments' administrative capacity. Divorcing from knowledge management would lead to various information resources isolated running in isolated, and that the electronic government would be unable to form an organic whole. Knowledge management can build an effective knowledge precipitation, clear up various channels of information flow, realize knowledge sharing, and promote e-government's development.

**3.2 The Model of Knowledge Management of e-Governance:** From a macroeconomic viewpoint, e-governance knowledge management process is similar to some extent to that of an enterprise, but in essence it is different in the object and purpose. The former is to provide community service and the latter is to enhance enterprise competitiveness and profitability of enterprise. A knowledge management conceptual model, which is composed of a knowledge collection subsystem, a knowledge organization subsystem and a knowledge application subsystem is set up depending on the availability of the software and the hardware environments of e-governance (Fig.3). There are interdependent and mutually supporting relationships among three subsystems.

**3.2.1Knowledge Collection Subsystem:** Knowledge collection subsystem is an input system of e-government knowledge management system, which is the foundation of knowledge management. The system focuses on the field of government knowledge. Its initial collection contains a wealth of knowledge and the information resources, which need to be identified and used by the other two systems. The subsystem includes:

- Knowledge Recognition,
- Knowledge Acquisition, and
- Knowledge Accumulation.

**3.2.2 Knowledge Organization Subsystem:** Knowledge organization subsystem is the core of knowledge management, which processes orderly the medley of knowledge. This subsystem is a bridge, which connects knowledge collection subsystem to knowledge application subsystem, and its functioning can directly influence the working of knowledge application subsystem and even the success of the entire knowledge management system. This subsystem includes

- Knowledge Classification,
- Knowledge Depot, and
- Knowledge Map.

**3.2.3 Knowledge Application Subsystem:** Knowledge application subsystem is an output system and is a constituent of the knowledge management system. Its user interface is the ultimate visible part. This subsystem colligates the results of the other two subsystems, cleans up and organizes related information, provides it to different power users. It can also create new knowledge on the basis of the other subsystems. The subsystem includes

- Knowledge Sharing,
- Knowledge Exchange, and
- Knowledge Creation

**4. Conclusion:**

Government has been the principal user of knowledge since times immemorial. The e-governance provides unique support to decision-making, which is the Primary function of government. The speed of technological change and the fast pace of development of new services and products; assign KM a crucial role in e-Governance. The need for workforce reductions, cost cutting measures and the demands of just-in-time production services and life-long learning are further factors that increase the importance of KM principles.

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